

## Eastern Longnose Spurdog, *Squalus grahami*

Report Card assessment	Recovering		
IUCN Red List Australian Assessment	Endemic to Australia	IUCN Red List Global Assessment	Near Threatened
Assessors	Cavanagh, R.D. & Lisney, T.J.		
Report Card Remarks	Highly depleted stocks in the southern part of the range; management actions expected to rehabilitate the stocks and little fishing pressure across majority of the range		

### Summary

The Eastern Longnose Spurdog is a deepwater dogfish that occurs off eastern Australia. The species has declined by as much as 97% in part of its range off New South Wales. Management measures have



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been implemented to promote recovery of depleted deepwater sharks on the southeast coast. The management actions are expected to rehabilitate the population in this region. This New South Wales area represents less than 20% of its known range, with the rest to the north where fishery threats are currently minimal. Therefore, the species is assessed as Near Threatened (IUCN) and Transitional Recovering (SAFS) because although recovery is expected to take decades, the severe declines were only across a part of its range, with little fishing pressure on the remainder of the population.

### Distribution

The Eastern Longnose Spurdog occurs from Cape York (Queensland) to Bermagui (New South Wales) (Last and Stevens 2009).

### Stock structure and status

The Eastern Longnose Spurdog was severely affected by commercial fishing in the southern part of its east coast range off southern New South Wales (NSW) (Graham et al. 2001). The abundance was reduced by about 97% over twenty years by trawling (Graham et al. 2001). This heavily depleted population represents less than 20% of its range on the east coast of Australia.

### Fisheries

The Eastern Longnose Spurdog is taken as bycatch in mostly deepwater trawl fisheries and in some line fisheries. Dramatic declines have been recorded of approximately 97% of 'greeneye dogsharks' (comprising *Squalus mitsukurii* and *Squalus grahami*) from 1976-1977 to 1996-1997 between central and southern New South Wales (NSW) (Graham et al. 2001). In 1976-1977 the two species were caught in approximately equal numbers off central and southern NSW, thus it is a fair assumption that the decline was roughly equal for both species in these areas. Almost all grounds suitable for trawls on

the slope off central and southern NSW is regularly fished in the Southern and Eastern Scalefish and Shark Fishery (SESSF), maintaining continual fishing pressure on the Eastern Longnose Spurdog. A ban on trawling below 700 m was implemented in the SESSF (AFMA 2006), though as this species occurs to 500 m, the ban would not have protected the Eastern Longnose Spurdog. A plan of management was later implemented with catch limits and spatial and depth closures to promote recovery of the overfished dogfish populations, with recovery estimated to take many decades (AFMA 2012). Almost half of the distribution of the species falls within the area of The Coral Sea Fishery. This is a very small fishery, with no trawl effort in recent years, thus threats to the species from fishing activity in this area are likely to be very minimal. It has been reported in very low numbers in the deepwater line fishery in Southern Queensland (Sumpton et al. 2013).

### Habitat and biology

The Eastern Longnose Spurdog is a demersal species on the upper continental slope at depths of 148 to 504 m. Maximum size is approximately 73 cm total length (TL), with males mature at approximately 52 cm TL and females at 63 cm TL (Last and Stevens 2009). The species has small litters of 3-5 pups (K Graham, pers. comm.). Little else is known of its biology.

Longevity and maximum size	Longevity: unknown Max size: ~73 cm TL
Age and/or size at maturity (50%)	Males: ~52 cm TL Females: ~63 cm TL

**Link to IUCN Page:** <https://www.iucnredlist.org/species/42727/10749277>

**Link to page at Shark References:** <http://www.shark-references.com/species/view/Squalus-grahami>

### References

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